## 1052-11-302 Lisa Berger\* (lbrgr@math.sunysb.edu), Stony Brook University, Mathematics Department, Stony Brook, NY 11794-3651. Surfaces dominated by products of curves and ranks of abelian varieties.

We will discuss a recent construction of surfaces dominated by products of curves, with the property that they remain DPC in towers of field extensions. We describe recent and current work which utilizes this construction to study ranks of elliptic curves and higher dimensional abelian varieties in towers of function field extensions. (Received August 31, 2009)